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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/715,438

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Mehryar Khailili Garakani

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09/26/2006

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EXAMINER

LEZAK, ARRIENNE M

ART UNIT

PAPER NUMBER

2143

DATE MAILED: 09/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/715,438

Applicant(s)

GARAKANI ET AL.

Examiner

Arrienne M. Lezak

Art Unit

2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-26 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 21-26 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Examiner notes that no Claims have been amended, as Claims 1-20 have been cancelled and Claims 21-26 have been added. Claims not explicitly addressed herein are found to be addressed within prior Office Action dated 30 March 2006 as reiterated herein below.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 21 & 24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Specifically, Examiner finds no support within the specification for "initially setting a voice over packet channel to voice mode at an originating gateway", and "enabling modem echo cancellation". Proper correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 21-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of US Patent US 6,504,838 B1 to Kwan in view of US Patent US 6,449,269 B1 to Edholm.

5. Regarding Claims 21-26, Kwan discloses a method & apparatus for establishing a high-speed modem relay connection over a voice frame network between an originating modem with an associated calling-leg gateway and an answering modem with an associated called-leg gateway, (Col. 87, lines 1-22), the method comprising:

- [Initially] setting a voice over packet channel to voice mode at an originating gateway, (Cols. 8-10), (Despite the fact that Applicant's specification does not support an initial setting of voice mode, Examiner finds the same would have been obvious, as noted by Applicant within the Amendment dated 30 June 2006, "In each mode, the resource manager invokes various services depending upon the mode of the call. It is possible that several different services related to several different modes, (i.e.: the voice mode), are possibly set up at the on hook state."

Additionally, Examiner notes that Applicant's claims do not preclude the setting of modes other than the voice mode from being in an on-hook state.);

- first detecting a predefined modulated answer tone, (i.e.: high speed modem – as Kwan clearly teaches differentiating between modem types as well as a V.34 modem, wherein vV.8 is a well known way by which V.34 modems negotiate connection features and options – per pending Claims 22, 23, 25 & 26), at a first (answering) voice frame network gateway corresponding with the answering modem, (Col. 66, lines 23 –67; Col. 67, lines 1-31; Col. 69, lines, 30-56; and Col. 87, lines 1-22);
- determining if voice compression, (Col. 8, lines 18-41), echo cancellation, (Col. 10, lines 5-67) or both are enabled, and disabling voice compression, echo cancellation or both, (Col. 8, lines 18-41; Col. 10, lines 4-67; & Col. 11, lines 1-53), (Examiner notes that Kwan does not specifically disclose that after detecting the first tone and before detecting the second tone, enabled voice compression is disabled, and enabled echo cancellation is disabled; however, the same would have been obvious to one of ordinary skill in the art at the time of invention by Applicant. The motivation to combine is noted by Examiner as a need to avoid problems occurring from the Voice Activity Detectors sensitivity to the Non-Linear Processor, as noted by the disablement functionality within Kwan with regards to the voice mode/voice activity detector, (Col. 10, lines 4-67; & Col. 11, lines 1-53));
- second detecting a predefined digital code at a second (calling) voice frame network gateway corresponding with the originating modem, (Col.

66, lines 23 –67; Col. 67, lines 1-31; Col. 69, lines, 30-56; and Col. 87, lines 1-22), (Despite the fact that Applicant's specification does not support enabling modem echo cancellation, Examiner finds the same would have been obvious, as noted by Applicant within the Amendment dated 30 June 2006, "In each mode, the resource manager invokes various services depending upon the mode of the call. It is possible that several different services related to several different modes, (i.e.: the voice mode), are possibly set up at the on hook state." Additionally, Examiner notes that echo cancellation is a service clearly taught by Kwan);

- suppressing (modem) signal transmission between the originating modem, (gateway) and the answering/receiving modem, (gateway), (Col. 67, lines 7-31);
- at the second (calling) gateway detecting two additional predefined digital codes from the originating modem and completing (calling) local physical layer negotiation to establish a connection, (Col. 66, lines 23 –67; Col. 67, lines 1-31; Col. 69, lines, 30-56; and Col. 87, lines 1-22);
- at the first (answering) gateway transmitting at least two additional predefined digital codes to the answering modem and completing (answering) local physical layer negotiation independently of the calling local physical layer negotiations to establish a connection, (Col. 66, lines 23 –67; Col. 67, lines 1-31; Col. 69, lines, 30-56; and Col. 87, lines 1-22); and

- upon completion of the negotiation, establishing a modem relay connection, and thus, enabling signal transmission between the originating modem and the answering modem, (Col. 67, lines 7-31);
- whereby the voice frame network connection is selectively automatically transitioned from voice mode to modem relay mode upon a determination that the originating and the answering modem are both high-speed modems, (Col. 10, lines 4-24; Col. 71, lines 54-67; Col. 72, lines 1-67; Col. 73, lines 1-51; and Col. 67, lines 7-31).

6. Examiner notes that Kwan teaches a user application layer manager configuring operational parameters including voice compression, which voice compression may initially be set to an on-hook state, wherein, in response to events from signaling services, the voice compression may be set to an off-hook state, (Kwan - Col. 9, lines 12-35). Additionally, Examiner notes that Kwan specifically teaches a means by which echo cancellation may be bypassed selectively, (Kwan - Col. 15, lines 13-61 & Col. 16, lines 14-47). That noted, Examiner additionally provides the Edholm reference which further discloses the selective encoding or decoding of inbound and outbound digitized voice respectively using industry standard H.323 compression techniques and echo cancellation procedures well known in the art, (Edholm - Col. 5, lines 55-67 & Col. 6, lines 1-12). Examiner finds motivation within the fact that both references clearly teach voice compression and echo cancellation disablement within a voice/data packet network; however, Examiner additionally offers the use of disablement techniques in the event that processor resources are taxed, (Kwan - Col. 49, lines 57-67 & Col. 50m,

lines 1-15). Thus, Claims 21-26 are found to be unpatentable over the combined teachings of Kwan and Edholm.

Response to Arguments

7. Applicant's arguments filed 30 June 2006, have been fully considered but they are not persuasive. Applicant's arguments do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how reconsideration avoids such references or objections.

8. Regarding Applicant's prior assertion that Kwan does not teach signal suppression, Examiner respectfully disagrees citing Kwan, (Cols. 66-71 – particularly Col. 67, lines 7-31), which discloses a data rate negotiation procedure, which procedure includes automatic data suppression during the negotiation process. Examiner further notes that the rate negotiation procedure taught by Kwan inherently includes all modem speeds for purposes of rate matching and suppression as necessary. Moreover, as Applicant notes within the "remarks" section, (p. 8/10) of the Amendment dated 23 July 2004, Kwan teaches "one type of signal that indicates that the modems are high speed modems", it is clear that Kwan inherently detects high-speed modem signals, which signals, when processed during the rate negotiation procedure, would inherently be suppressed as necessary.

9. In response to applicant's previous argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Examiner finds that Kwan clearly teaches both voice compression, (Col. 8, lines 26-27), and echo cancellation, (Col. 10, lines 25), wherein use, (or disablement), of the same for any purpose would have been obvious for the creation of an efficient and robust integrated system for the exchange of voice, fax and modem data between telephony devices and packet based networks, (Col. 1, lines 60-63). Moreover, Examiner notes that Applicant only argues the "data transmission mode" wherein Kwan clearly teaches four operational modes, (Col. 8, lines 18-41), including, a voice mode, which voice mode functionalities clearly and obviously render Applicant's claim language unpatentable, as noted herein above.

10. Additionally, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as

compared to the prior art. See *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963).

11. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "a specific transition from a voice mode to a modem relay mode") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). That noted, Examiner reiterates that the same would have been obvious, as noted by Applicant within the Amendment dated 30 June 2006, "In each mode, the resource manager invokes various services depending upon the mode of the call. It is possible that several different services related to several different modes, (i.e.: the voice mode), are possibly set up at the on hook state."

Additionally, Examiner notes that Applicant's claims do not preclude the setting of modes other than the voice mode from being in an on-hook state, wherein the subsequent change to an off-hook state clearly and obviously changes mode availability.

12. Thus, as Examiner has completely addressed Applicant's amendment, and finding Applicant's arguments do not show how reconsideration avoids such references or objections, Examiner hereby maintains the original rejection of all claims in their entirety.

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

14. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

US Patent 5,754,589 to Maitra.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arrienne M. Lezak whose telephone number is (571)-272-3916. The examiner can normally be reached on M-F 8:30-4:30.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on (571)-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Arrienne M. Lezak
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